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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,409	02/20/2004	Sven Bulow	KLAUS2.005AUS	6350

20995 7590 12/04/2008  
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EXAMINER
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JUNG, UNSU

ART UNIT	PAPER NUMBER
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1641

NOTIFICATION DATE	DELIVERY MODE
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12/04/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/783,409	<b>Applicant(s)</b> BULOW, SVEN	
	<b>Examiner</b> UNSU JUNG	<b>Art Unit</b> 1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/30/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 2, 2008 has been entered. The submission included amendments to the specification and claim 1.

### ***Status of Claims***

2. Claims 1-6 are pending and under consideration for patentability under 37 CFR 1.104.

### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on June 30, 2008 has been considered by the examiner.

### ***Objections Withdrawn***

4. The objection of the specification has been withdrawn in view of amended specification in the reply filed on September 2, 2008.

***Rejections Withdrawn***

5. The following rejections have been withdrawn in view of amended independent claim 1 in the reply filed on September 2, 2008.

- The rejection of claims 3 and 4 under 35 U.S.C. 112, second paragraph;
- Rejection of claims 1-3, 5, and 6 under 35 U.S.C. 102(b) as being anticipated by Kroy et al. (U.S. Patent No. 5,252,294, Oct. 12, 1993); and
- Rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over Kroy et al. (U.S. Patent No. 5,252,294, Oct. 12, 1993) in view of Mainquist et al. (U.S. Patent No. 6,534,014, published on Mar. 18, 2003 and filed on May 11, 2000).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kroy et al. (U.S. Patent No. 5,252,294, Oct. 12, 1993) (hereinafter "Kroy") in view of Barbera-Guillem (U.S. PG Pub. No. US 2002/0172621 A1, Nov. 21, 2002).

Kroy teaches a chamber array arrangement for performing screening assays comprising a container (a plate) having at least two chambers (plate has depressions which can be tapering circular wells, column 3, lines 9-15), wherein in a particular chamber at least one probe carrier is present (wells appear to contain various reagents, including reagents with carriers, column 4, lines 31-41), wherein the probe carrier is essentially freely movable (separable, column 4, lines 31-41) in said particular chamber and wherein the container is provided with a circular bottom having a surface area which is smaller than the bottom surface area of a well of a microtiter plate (column 3, lines 9-15).

With respect to claim 2, Kroy teaches that the chamber array arrangement further comprising a cover arranged on one or more of the two chambers (reference element 3 in Fig. 3).

With respect to claim 3, Kroy teaches a cover made from a non-bonding material (semiconductor material, column 2, lines 35-46), which allows probe or probe pool to be retained completely in the chamber.

With respect to claim 5, the cover of Kroy is removable (Fig. 1).

With respect to claim 6, Kroy teaches that the chamber array arrangement further comprises a carrier having a location adapted to receive the container (Fig. 14).

However, Kroy fails to specifically teach that the microtiter plate is a standard 24, 96, or 384 well microtiter plates.

Barbera-Guillem teaches well known assay plate format of standard microtiter plates with 24, 96, and 384 wells (see entire document, particularly, p4, paragraph [0035]). These microtiter plates are well known in the biological assay arts and they are well suited for automated liquid handling systems known in the arts (p4, paragraph [0035])

Therefore, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to design the chamber array arrangement of Kroy to fit standard 24, 96, or 384 well microtiter plates of Barbera-Guillem since microtiter plates are well known in the biological assay arts and they are well suited for an automated liquid handling systems known in the arts. The advantage of being compatible with automated liquid handling systems known in the arts provides the motivation to combine teachings of Kroy and Barbera-Guillem with a reasonable expectation of success.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kroy (U.S. Patent No. 5,252,294, Oct. 12, 1993) in view of Barbera-Guillem (U.S. PG Pub. No. US 2002/0172621 A1, Nov. 21, 2002) as applied to claims 1-3 above, and further in view of Mainquist et al. (U.S. Patent No. 6,534,014, published on Mar. 18, 2003 and filed on May 11, 2000) (hereinafter "Mainquist").

Kroy in view of Barbera-Guillem teaches a chamber array arrangement for performing screening assays as set forth above. Although Kroy teaches a cover, which would allow to retain the probe or probe pool essentially completely in the respective chamber, Kroy in view of Barbera-Guillem fails to teach a chamber array arrangement, wherein the cover being a membrane having a pore size smaller than the size of the probe carrier with the probe attached or of the free probe.

Mainquist teaches a specimen plate lid (cover) that provides enhanced sealing and provides increased efficiency in placement on a specimen plate or removal from a specimen plate (see entire document, particularly column 2, lines 10-14). It is known to provide a lid to cover a specimen plate (column 1, lines 44-55). For example, the samples in the wells may need to incubate or it may be desired to store the samples for an extended period of time (column 1, lines 44-49). By covering the wells, contamination and evaporation may be reduced (column 1, lines 44-49). It is an advantage of specimen plate lid that it can be accurately and relatively efficiently positioned on a specimen plate (column 2, lines 52-54). Since the lid and its compressible seal alone provide a good barrier between the specimen plate wells and the outside environment, additional mechanical and adhesive sealing is not required (cover made from a non-bonding material, column 2, lines 54-57). The specimen plate lid is well suited for handling by a robotic material handling system. Since the lid is self-sealing with specimen plate, operator intervention is not required to mechanically seal the plate (column 2, lines 65-67). With respect to claim 4, Mainquist teaches a membrane cover having an adjustable permeability (a pore size, column 7, lines 49-54).

Therefore, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to employ a cover of Mainquist on the chamber array arrangement of Kroy in view of Barbera-Guillem in order to prevent contamination and evaporation in the wells of the chamber array arrangement.

The advantage of a chamber array arrangement cover comprising a non-bonding material, which can be accurately and relatively efficiently positioned on the chamber array arrangement without additional mechanical and adhesive sealing, provides the motivation to employ a cover of Mainquist et al. on the chamber array arrangement of Kroy in view of Barbera-Guillem with a reasonable expectation of success since the cover of Mainquist can be used for chamber array arrangement in multi-well plate format. Further, Mainquist also teaches that the cover provides a good barrier between the specimen plate wells and the outside environment (column 2, lines 54-57) to reduce contamination and evaporation (column 1, lines 44-49). Therefore, one of ordinary skill in the art at the time of the invention would recognize that the permeability (pore size) of the membrane cover of Kroy in view of Barbera-Guillem would intrinsically have a size smaller than the size of the probe carrier contained in the chambers of the chamber array arrangement since the membrane cover serves as a barrier between specimen plate wells/chambers in order to reduce contamination and evaporation.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.



Since the prior art fulfills all the limitations currently recited in the claims, the invention as currently recited would read upon the prior art.

### ***Conclusion***

11. No claim is allowed.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to UNSU JUNG whose telephone number is (571)272-8506. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Shibuya can be reached on 571-272-0806. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Unsu Jung/  
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Patent Examiner  
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